AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1 - 18 (Cancelled)

19. (Previously Presented) A pointing device comprising:

a ring-like magnet that is movably supported in a plane, and is magnetized such that said ring-like magnet comprises inner and outer ring sections of north and south magnetization that are both in said plane along a radius of said ring-like magnet; and

a plurality of magnetic sensors for detecting magnetic flux density produced by said ring-like magnet in a direction parallel to said plane are placed outside said ring-like magnet, wherein

said magnetic sensors are disposed symmetrically from each other to said ring-like magnet,

said magnetic sensors are positioned to detect variations in the magnetic flux density in the direction parallel to said plane, the variations being caused by movement of said ring-like magnet in a direction parallel to said plane.

20. (Cancelled)

21. (Previously Presented) The pointing device as claimed in claim 19, further comprising a printed circuit board on which a resin layer with elastic deformation is provided, wherein said ring-like magnet is fixed to said resin layer, and said ring-like magnet is movably supported in parallel to said printed circuit board, said magnetic sensors are placed on said printed circuit board.

22. (Cancelled)

23. (Previously Presented) The pointing device as claimed in claim 19, wherein said magnetic sensors are magnetic sensors utilizing Hall effect, and the output signals are proportional to the magnetic flux density.

24. (Previously Presented) The pointing device as claimed in claim 19, wherein said magnetic sensors are magnetic sensors utilizing magneto-resistive effect.

25. (Previously Presented) The pointing device as claimed in claim 19, further comprising an origin returning means for returning said ring-like magnet to the origin using magnetic force generated by said ring-like magnet.

26. (Previously Presented) The pointing device as claimed in claim 19, wherein said magnetic sensors are disposed and faced to one of the outer ring sections of said ring-like magnet.

27-32 (Cancelled).

33. (Previously Presented) The pointing device as claimed in claim 21, wherein said resin layer and said printed circuit board have their opposing faces not bonded to each other.

34. (Previously Presented) The pointing device as claimed in claim 21, wherein said resin layer is an elastic sheet.

35. (Previously Presented) The pointing device as claimed in claim 21, wherein said resin layer is a silicone resin.

36. (Cancelled).

37. (Previously Presented) The pointing device as claimed in claim 21, further comprising a switch on the resin layer side of said printed circuit board and at about the center of said ring-like magnet.

38. (Previously Presented) The pointing device as claimed in claim 37, further comprising a projection for depressing said switch at a portion facing said switch on said resin layer.

39-42. (Cancelled)

43. (Previously Presented) The pointing device as claimed in claim 23, wherein said magnetic sensors utilizing the Hall effect are disposed on the resin layer side of said printed circuit board to detect the magnetic flux density in a direction parallel to the surface of said printed circuit board.

44. (Previously Presented) The pointing device as claimed in claim 23, wherein said magnetic sensors utilizing the Hall effect are magnetic sensors with a single output terminal.

45. (Cancelled)

46. (Previously Presented) The pointing device as claimed in claim 24, wherein said magnetic sensors utilizing the magneto-resistive effect are semiconductor magneto-resistive elements which are disposed on the resin layer side of said printed circuit board to detect the magnetic flux density in a direction parallel to the surface of said printed circuit board.

47. (Previously Presented) The pointing device as claimed in claim 24, wherein said magnetic sensors utilizing the magneto-resistive effect are four semiconductor magneto-resistive elements disposed symmetrically on X and Y axes, which are two axes on a two dimensional plane of an orthogonal system, wherein two magnetic sensors on the X axis are electrically connected at a first connection point; and two magnetic sensors on the Y axis are electrically connected at a

second connection point, and wherein said pointing device detects variations in ambient magnetic flux density caused by movement of said ring-like magnet using electric signals at the first and second connection points.

48. (Cancelled)

49. (Previously Presented) An electronic device incorporating the pointing device as defined in any one of claims 19, 21, 23-26, 33-35, 37, 38, 43, 44, 46, and 47.

50. (Original) The pointing device as claimed in claim 19, wherein said ring-type magnet is magnetized at M sets of north-south poles, where M = K x I, K equals the number of magnetic sensors, and I is an integer equal to or greater than one.

51. (Currently Amended) A pointing device comprising:

a ring-like magnet that is movably supported in a plane, and is internally and externally magnetized along said ring in said plane; and

a plurality of magnetic sensors wherein said plurality of magnetic sensors are positioned such that a distance from an intersection of ~~a location~~ half way between an upper and lower surface of said ring-like magnet and [[to]] a ~~location~~ half way point ~~between an upper and lower surface of one~~ of said magnetic sensors is within a range from 0 [[and]] to 0.75 mm in a vertical direction to said plane,

wherein said magnetic sensors are positioned to detect variations in the

magnetic flux density in the direction parallel to said plane, the variations being caused by movement of said ring-like magnet.

52. (Previously Presented) The pointing device as claimed in claim 51, wherein said magnetic sensors are magnetic sensors utilizing magneto-resistive effect.

53. (Previously Presented) The pointing device as claimed in claim 52, wherein said magnetic sensors utilizing the magneto-resistive effect are four semiconductor magneto-resistive elements disposed symmetrically on X and Y axes, which are two axes on a two dimensional plane of an orthogonal system, wherein two magnet sensors on the X axis are electrically connected at a first connection point; and two magnetic sensors on the Y axis are electrically connected at a second connection point, and wherein said pointing device detects variations in ambient magnetic flux density caused by movement of said ring-like magnet using electric signals at the first and second connection points.

54. (Previously Presented) The pointing device as claimed in the claim 51, wherein said ring-like magnet is internally and externally unipolarly magnetized.

55. (Previously Presented) The pointing device as claimed in claim 51, wherein said ring-like magnet is internally and externally magnetized in a multipolar manner in the direction of its circumference, and said magnetic sensors are faced to a magnetic pole of said ring-like magnet magnetized in a multipolar manner.

56. (Previously Presented) The pointing device as claimed in claim 51, wherein said magnetic sensors are disposed symmetrically on X and Y axes, which are two axes on a two dimensional plane of an orthogonal system, and said ring-like magnet is placed near said magnetic sensors.

57. (Previously Presented) The pointing device as claimed in claim 51, wherein said magnetic sensors are magnetic sensors utilizing Hall effect, and the output signals are proportional to the magnetic flux density.

58. (Previously Presented) The pointing device as claimed in claim 57, wherein said magnetic sensors utilizing the Hall effect are magnetic sensors with a single output terminal.

59. (Previously Presented) The pointing device as claimed in claim 51, further comprising an origin returning means for returning said ring-like magnet to the origin using magnetic force generated by said ring-like magnet.

60. (Previously Presented) The pointing device as claimed in claim 51, further comprising a printed circuit board on which a resin layer with elastic deformation is provided, a switch on the resin layer side of said printed circuit board and at about the center of said ring-like magnet, and a projection for depressing said switch at a portion facing said switch on said resin layer.

61. (Previously Presented) The pointing device as claimed in claim 60, wherein said resin layer and said printed circuit board have their opposing faces not bonded to each other.

62. (Previously Presented) The pointing device as claimed in claim 60, wherein said resin layer is an elastic sheet.

63. (Previously Presented) The pointing device as claimed in claim 60, wherein said resin layer is a silicone resin.

64. (Previously Presented) An electronic device incorporating the pointing device as defined in claim 51.

65. (Previously Presented) The pointing device as claimed in claim 51, wherein said distance in the vertical direction is within 0 and 0.5 mm.

66. (Previously Presented) The pointing device as claimed in claim 51, wherein said distance in the vertical distance is within 0 and 0.25 mm.

67. (Previously Presented) The pointing device as claimed in claim 51, wherein said sensor portion is at a location halfway between an upper and lower surface of one of said magnetic sensors.

68. (New) The pointing device as claimed in claim 19, wherein said inner ring sections are of both north and south magnetization such that inner ring sections of north magnetization are placed in an alternative manner with respect to inner ring sections of south magnetization along an inner circumference of said ring-like magnet.

69. (New) The pointing device as claimed in claim 68, wherein said outer ring sections are of both north and south magnetization such that outer ring sections of north magnetization are placed in an alternative manner with respect to outer ring sections of south magnetization along an outer circumference of said ring-like magnet.

70. (New) The pointing device as claimed in claim 69, wherein said inner ring sections of north magnetization are placed opposite to said outer ring sections of south magnetization, and said inner ring sections of south magnetization are placed opposite to said outer ring sections of north magnetization.